



6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R03-OAR-2018-0277; FRL-9979-44-Region 3]

**Approval and Promulgation of Air Quality Implementation Plans;
Pennsylvania; Removal of Department of Environmental Protection Gasoline Volatility
Requirements for the Pittsburgh-Beaver Valley Area**

AGENCY: Environmental Protection Agency (EPA).

ACTION: Direct final rule.

SUMMARY: The Environmental Protection Agency (EPA) is taking direct final action to approve a revision to the Commonwealth of Pennsylvania state implementation plan (SIP) submitted by the Pennsylvania Department of Environmental Protection (PADEP) on May 2, 2018. This revision seeks the removal, from the Pennsylvania SIP, of the requirement limiting summertime gasoline volatility to 7.8 pounds per square inch (psi) Reid Vapor Pressure (RVP) to address nonattainment under the 1-hour ozone national ambient air quality standard (NAAQS) in the Pittsburgh-Beaver Valley ozone nonattainment area (hereafter Pittsburgh-Beaver Valley Area). The submitted SIP revision also includes a section 110(l) demonstration as required by the Clean Air Act (CAA) addressing emission impacts associated with the removal of the program. EPA is approving these revisions to the Pennsylvania SIP in accordance with the requirements of the Clean Air Act (CAA).

DATES: This rule is effective on **[insert date 60 days after date of publication in the Federal Register]** without further notice, unless EPA receives adverse written comment by **[insert date**

30 days after date of publication in the Federal Register]. If EPA receives such comments, it will publish a timely withdrawal of the direct final rule in the **Federal Register** and inform the public that the rule will not take effect.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R03-OAR-2018-0277 at <http://www.regulations.gov>, or via email to spielberger.susan@epa.gov. For comments submitted at Regulations.gov, follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. For either manner of submission, EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be confidential business information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, please contact the person identified in the “For Further Information Contact” section. For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <http://www2.epa.gov/dockets/commenting-epa-dockets>.

FOR FURTHER INFORMATION CONTACT: Brian Rehn, (215) 814-2176, or by e-mail at rehn.brian@epa.gov.

SUPPLEMENTARY INFORMATION: Throughout this document whenever “we,” “us,” or

“our” is used, we refer to EPA. This supplementary information section is arranged as follows:

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I. Background

A. Federal Gasoline Volatility Controls Under the CAA

Under section 211(c) of the CAA, EPA promulgated regulations on March 22, 1989 (54 FR 11868) that set maximum federal limits for the RVP of gasoline sold during the regulatory control periods that were established on a state-by-state basis in the final rule. The regulatory control periods applied during the summer months when peak ozone concentrations were expected. These regulations constituted Phase I of a two phase nationwide program, which was designed to reduce the volatility of commercial gasoline during the high ozone season.

Depending on the state and month, gasoline RVP was not to exceed 10.5 psi, 9.5 psi, or 9.0 psi. Phase I was applicable to calendar years 1989 through 1991. On June 11, 1990 (55 FR 23658), EPA promulgated more stringent volatility controls as Phase II of the volatility control program. These requirements established maximum RVP standards of 9.0 psi or 7.8 psi (depending on the state, the month, and the area's initial ozone attainment designation with respect to the 1-hour ozone NAAQS). Phase II is applicable to 1992 and subsequent years.

The 1990 amendments to the CAA established a new section, 211(h), to address fuel volatility. Section 211(h)(1) requires EPA to promulgate regulations making it unlawful to sell, offer for sale, dispense, supply, offer for supply, transport, or introduce into commerce gasoline with an RVP level in excess of 9.0 psi during the high ozone season. Section 211(h)(2) prohibits EPA from establishing a volatility standard more stringent than 9.0 psi in an attainment area, except that the Agency may impose a lower (more stringent) standard in any former ozone nonattainment area redesignated to attainment.

On December 12, 1991 (56 FR 64704), EPA modified the Phase II volatility regulations to make them consistent with section 211(h). The modified regulations prohibited the sale of gasoline, beginning in 1992, with a RVP above 9.0 psi in all areas designated attainment for ozone. For areas designated as nonattainment, the regulations retained the original Phase II standards published on June 11, 1990 (55 FR 23658), which included the 7.8 psi ozone season limitation for certain areas.

Under these requirements, the Commonwealth of Pennsylvania was required to meet a 9.0 psi RVP standard during the summer RVP control period, with the exception of the Philadelphia Area, which was at that time was designated as severe ozone nonattainment, and as such was subject to more stringent gasoline requirements of the reformulated gasoline program established under CAA section 211(k).

B. State Gasoline Volatility Controls for the Pittsburgh-Beaver Valley Area

On November 15, 1990, the CAA amendments of 1990 were signed into law. On November 6, 1991, EPA designated and classified the Pittsburgh-Beaver Valley Area as moderate nonattainment for the 1979 1-hour ozone NAAQS. As part of Pennsylvania's efforts to bring the Pittsburgh-Beaver Valley Area into attainment of the ozone standard, the Commonwealth adopted and implemented a range of ozone precursor emissions control measures for the area, including adoption of a state rule to limit summertime gasoline volatility to 7.8 psi RVP. Pennsylvania's RVP control rule applies to the entire Pittsburgh-Beaver Valley Area – Allegheny, Armstrong, Beaver, Butler, Fayette, Washington, and Westmoreland Counties. PADEP promulgated this rule in the November 1, 1997 *Pennsylvania Bulletin* (27 Pa.B. 5601,

effective November 1, 1997), which is codified in Subchapter C of Chapter 126 of the Pennsylvania Code of Regulations (25 Pa. Code Chapter 126, Subchapter C). On April 17, 1998, Pennsylvania submitted this state-adopted rule to EPA as a formal revision to its approved SIP. EPA published a final action approving Pennsylvania's RVP SIP revision in the June 8, 1998 Federal Register (63 FR 31116) and codified in the *Code of Federal Regulations* at 40 CFR 52.2020(c)(1).

The local air pollution control agency for Allegheny County, ACHD, later adopted a similar summertime gasoline volatility limit (Allegheny County Order No. 16782, Article XXI, sections 2102.40, 2105.90, and 2107.15; effective May 15, 1998, amended August 12, 1999). On March 23, 2000, PADEP formally submitted a SIP revision to EPA (on behalf of ACHD) to incorporate ACHD's own gasoline RVP summertime requirements into the Pennsylvania SIP. EPA approved that SIP revision establishing an independent ACHD gasoline RVP limit on April 17, 2001 (66 FR 19724), effective June 18, 2001.

II. What Changes Have Been Made to Pennsylvania's Gasoline Volatility Standards?

In the 2013-14 session of the Pennsylvania General Assembly, the legislature passed and Governor Corbett signed into law Act 50 (P.L. 674, No. 50 of May 14, 2014). Act 50 amended the Pennsylvania Air Pollution Control Act to direct PADEP to initiate a process to obtain approval from EPA of a SIP revision that demonstrates continued compliance with the NAAQS, through utilization of substitute, commensurate emissions reductions to balance repeal of the Pittsburgh-Beaver Valley Area RVP limit. Upon approval of that demonstration revision, Act 50 directs PADEP to repeal the summertime gasoline RVP limit provisions of 25 Pa. Code Chapter

126, Subchapter C.

On May 2, 2018, PADEP submitted a SIP revision requesting that EPA remove from the Pennsylvania SIP Chapter 126, Subchapter C of the Pennsylvania Code (specifically removing 25 Pa. Code sections 126.301, 126.302, and 126.303), based upon a demonstration that the repeal of the RVP requirements rule (coupled with other ozone precursor emission reduction measures) would not interfere with the Pittsburgh-Beaver Valley Area's attainment of any NAAQS, per the requirements for noninterference set forth in section 110(l) of the CAA. Pennsylvania's SIP revision contains a Pennsylvania-specific analysis that the emissions impact from repeal of the 7.8 psi gasoline volatility requirement in Pittsburgh (to be replaced by the federal 9.0 psi summertime gasoline requirement) would be offset by substitution of commensurate benefits from other emission reduction measures enacted by Pennsylvania, but not previously credited in any SIP towards attainment or maintenance of any NAAQS. This analysis is performed through analysis of emission inventory sectors and sources affected by both repeal of gasoline RVP limits and of the substitute measures enacted by Pennsylvania.

The May 2, 2018 SIP revision references the Commonwealth's regulatory amendment to Chapter 126, Subchapter C, as published in the April 7, 2018 *Pennsylvania Bulletin* (48 Pa. B. 1932, effective upon publication). This amendment serves to repeal the PADEP requirement for 7.8 psi RVP summer gasoline. The Commonwealth's rule amends 25 Pa. Code Section 126.301 (relating to gasoline volatility requirements) to remove the RVP requirement for the Pittsburgh-Beaver Valley Area RVP upon the effective date of EPA's approval of Pennsylvania's May 2, 2018 SIP revision. As a result, both state and federal repeal of the requirements for summertime

RVP in the area will coincide with the effective date of EPA's final action to approve the Commonwealth's related SIP submittals.

III. What is the Historic Reason for Adoption of Gasoline Volatility Control and the Status of Air Quality in the Pittsburgh-Beaver Valley Area?

The gasoline volatility limit was originally adopted by Pennsylvania as part of a suite of measures to address ground level ozone pollution in the Pittsburgh-Beaver Valley Area, which has historically been designated nonattainment for the ozone NAAQS. Since passage of the CAA in 1990, portions of the Pittsburgh-Beaver Valley Area have also been designated nonattainment for the daily and annual averaging period fine particulate matter (PM_{2.5}) NAAQS. Since the low-RVP gasoline program affects primarily volatile organic compounds (VOCs) and nitrogen oxides (NO_x) emissions, and to some degree directly emitted PM_{2.5} emissions, our review of the removal of this rule focuses on the NAAQS for which these emissions contribute, either directly or as precursor emissions.

A. The Status of the Pittsburgh-Beaver Valley Area with Respect to the Ozone NAAQS

On November 6, 1991 (56 FR 56694), EPA designated and classified the Pittsburgh counties of Allegheny, Armstrong, Beaver, Butler, Fayette, Washington, and Westmoreland Counties as nonattainment for the 1-hour ozone NAAQS promulgated by EPA in 1979. RVP control was one of a suite of measures adopted by Pennsylvania to attain and maintain the 1-hour ozone NAAQS.

On April 9, 2001, Pennsylvania submitted a request to redesignate the Pittsburgh-Beaver Valley Area to attainment of the 1979 1-hour ozone NAAQS, along with a maintenance plan to

demonstrate that the area would continue to attain for a 10-year period – a plan which relied, in part, on emissions reductions attributable to the summertime gasoline volatility control program. Subsequently, EPA determined that the Pittsburgh-Beaver Valley Area had attained the 1979 1-hour ozone NAAQS by its extended attainment date and approved the Commonwealth's 1-hour redesignation request and maintenance plan SIP revision on November 19, 2001 (66 FR 53094).

On July 18, 1997 (62 FR 38856), EPA issued a revised NAAQS for ozone, strengthening the primary and secondary standards to 0.080 parts per million (ppm) and changing the averaging time from 1-hour to 8-hours. EPA initially designated the Pittsburgh-Beaver Valley Area as nonattainment for the 1997 NAAQS, under the general part D, subpart 1 provisions of the CAA on July 15, 2004. However, in response to litigation, EPA later classified several areas, including Pittsburgh-Beaver Valley, as moderate under the CAA part D, subpart 2 provisions in May of 2012.¹

On April 4, 2013, EPA determined that the Pittsburgh-Beaver Valley Area had attained the 1997 8-hour ozone NAAQS by its applicable attainment date (based on air monitoring data for the 2007-2009 period) and warranted a clean data determination. This latter determination suspended certain CAA planning requirements for the Area, including requirements for an attainment demonstration, associated reasonable further progress plan, contingency measures, reasonably available control measure (RACM) analysis, and other CAA part D planning

¹In 2012, EPA finalized revisions to the 2004 Phase 1 Implementation Rule for the 1997 8-hour ozone NAAQS that specified requirements to meet the 1997 ozone NAAQS. (77 FR 28424, May 14, 2012). The revisions were EPA's response to a December 22, 2006 decision in *South Coast Air Quality Management District v. EPA*, 472 F.3d 882 (D.C. Cir. 2006), directing EPA to classify areas under Part D of the CAA. As a result, EPA reclassified the former subpart 1 nonattainment areas, like the Pittsburgh Beaver Valley Area, under subpart 2. The 1997 8-Hour Ozone NAAQS was eventually revoked on April 6, 2015, coincident with promulgation of the later 2008 ozone NAAQS.

requirements for moderate ozone nonattainment areas, for as long as the area continued to monitor attainment of the NAAQS.

On March 27, 2008 (73 FR 16436), EPA strengthened the 8-hour NAAQS from 0.080 to 0.075 ppm in 2008. On March 6, 2015 (77 FR 30088), EPA designated and classified the Pittsburgh-Beaver Valley Area as marginal nonattainment for the 2008 8-hour ozone NAAQS. Also on March 6, 2015 (80 FR 12264), EPA published its ozone implementation rule for the 2008 ozone NAAQS in which established the date of July 20, 2016 as a deadline for attainment of the 2008 NAAQS. On December 6, 2016 (81 FR 87819), EPA determined that the Pittsburgh-Beaver Valley Area had attained the 2008 ozone NAAQS by that July 20, 2016 deadline.² The Pittsburgh-Beaver Valley Area continues to attain the 2008 ozone NAAQS for the most recent 2015-2017 three-year monitoring period.

On October 1, 2015 (80 FR 65291), EPA promulgated a revised ozone NAAQS of 0.070 ppm. On November 6, 2017 (82 FR 54232), EPA issued final 2015 ozone NAAQS designations for most U.S. counties, designating all seven Pittsburgh-Beaver Valley Area counties as “attainment/unclassifiable.”

² On February 16, 2018, the D.C. Circuit Court issued an opinion on the EPA’s regulations implementing the 2008 ozone NAAQS, known as the 2008 Ozone SIP Requirements Rule. *South Coast Air Quality Mgmt. Dist. v. EPA*, No. 15-1115 (D.C. Cir. Feb. 16, 2018). The D.C. Circuit Court found certain provisions from the 2008 Ozone SIP Requirements rule unreasonable including EPA’s provision for a “redesignation substitute.” The D.C. Circuit Court vacated these provisions and found redesignations must comply with all required elements in CAA section 107(d)(3) and thus found the “redesignation substitute” which did not require all items in CAA section 107(d)(3)(E) violated the CAA and was thus unreasonable. The D.C. Circuit Court also vacated other provisions relating to anti-backsliding in the 2008 Ozone SIP Requirements Rule as the Court found them unreasonable. *Id.* The D.C. Circuit Court found other parts of the 2008 Ozone SIP Requirements Rule unrelated to anti-backsliding and this action reasonable and denied the petition for appeal on those. *Id.*

Pennsylvania's May 2, 2018 SIP revision includes EPA's updated photochemical grid modeling results for the 2008 ozone NAAQS (*See* Appendix H), based on updated electric generating unit data for 2017.³ This forecast data predicts that the Pittsburgh-Beaver Valley Area will continue to attain the 2008 ozone NAAQS and maintain attainment of the 2015 ozone NAAQS by 2023.

B. The Status of the Pittsburgh-Beaver Valley Area with Respect to the Fine Particulate Matter NAAQS

On October 17, 2006, EPA published a revised 24-hour PM_{2.5} NAAQS (71 FR 61144). On November 3, 2009, EPA designated the Pittsburgh-Beaver Valley Area as nonattainment for the 2006 PM_{2.5} NAAQS (74 FR 58688) under CAA part D, subpart 1. On June 2, 2014, EPA reclassified the Pittsburgh-Beaver Valley Area as moderate nonattainment under CAA part D, subpart 4 (79 FR 31566), including all of Beaver, Butler, Washington, and Westmoreland Counties and portions of Allegheny, Armstrong, Greene, and Lawrence Counties. On May 2, 2014, EPA determined that the Pittsburgh-Beaver Valley area was in attainment of the 2006 annual and 24-hour PM_{2.5} NAAQS based on 2010-2012 ambient monitoring data (79 FR 25014). On October 2, 2015 (80 FR 59624), EPA approved a request from Pennsylvania to redesignate the Pittsburgh Area to attainment of the 1997 annual and 2006 24-hour PM_{2.5} NAAQS.

On January 15, 2015, EPA published a revised annual PM_{2.5} NAAQS (79 FR 3086). On April 7, 2015, EPA designated Allegheny County as moderate nonattainment of the 2012 annual PM_{2.5}

³ EPA Projected 2023 Ozone Design Values for the Pittsburgh – Beaver Valley Area
Source: Notice of Availability - Preliminary Interstate Ozone Transport Modeling Data for the 2015 Ozone NAAQS. Data Spreadsheet is available at: https://www.epa.gov/sites/production/files/2016-12/2015_o3_naaqs_preliminary_transport_assessment_design_values_contributions.xlsx.

NAAQS (80 FR 18535).⁴ Allegheny County continues to be nonattainment for the 2012 annual PM_{2.5} NAAQS.

IV. What is EPA's Analysis of the Commonwealth's Submittal?

A. Pennsylvania's Estimate of the Impacts of Removing the 7.8 psi RVP Requirement

EPA's primary consideration for determining the approvability of Pennsylvania's request to rescind the requirements for a gasoline volatility control program is whether this requested action complies with section 110 of the CAA, specifically section 110(l).⁵ Section 110(l) of the CAA requires that a revision to the SIP not interfere with any applicable requirement concerning attainment and reasonable further progress (as defined in section 171), or any other applicable requirement of the CAA. EPA evaluates each section 110(l) noninterference demonstration on a case-by-case basis considering the circumstances of each SIP revision. EPA interprets CAA section 110(l) as applying to all NAAQS that are in effect, including those that have been promulgated, but for which EPA has not yet made designations.

In the absence of an attainment demonstration to demonstrate no interference with any applicable NAAQS or requirement of the CAA under section 110(l), EPA believes it is appropriate to allow states to substitute equivalent emissions reductions to compensate for any change to a SIP-approved program, if net actual emissions in the air do not increase. "Equivalent" emission reductions mean reductions which are equal to or greater than those reductions achieved by the

⁴ This action corrects an initial final designations action for the 2012 PM_{2.5} NAAQS, which was signed by EPA on December 18, 2014 and published January 15, 2015 (80 FR 2206). This correction included more recently available data for use in designating certain areas of the country.

⁵ CAA section 193, with respect to removal of requirements in place prior to enactment of the 1990 CAA Amendments, is not relevant because Pennsylvania's RVP control requirements in the Pittsburgh-Beaver Valley Area were not included in the SIP prior to enactment of the 1990 CAA amendments.

control measure approved in the SIP. To show that compensating emission reductions are equivalent, modeling or adequate justification must be provided. The compensating, equivalent reductions must represent real, new emissions reductions achieved in a contemporaneous time frame to the change of the existing SIP control measure, in order to preserve the status quo level of emissions in the air. In addition to being contemporaneous, the equivalent emissions reductions must also be permanent, enforceable, quantifiable, and surplus to be approved into the SIP.

In its May 2, 2018 SIP revision, PADEP includes a section 110(l) demonstration that uses equivalent emission reductions to offset “losses” from emission reductions resulting from the removal of the SIP approved 7.8 psi RVP summertime gasoline requirement in the Pittsburgh-Beaver Valley Area of Pennsylvania. Specifically, PADEP demonstrates the emission reductions associated with the 7.8 psi RVP fuel requirement will be substituted with equivalent or greater emissions reductions from: 1) Reductions from an adopted, implemented Pennsylvania regulation relating to the use and application of adhesives, sealants, primers, and solvents at 25 Pa. Code Section 129.77 and 2) the permanent shutdown of a facility in the Pittsburgh-Beaver Valley Area. These substitute emissions are quantifiable, permanent, surplus, enforceable, and contemporaneous (i.e. occurring at approximately the same period of this demonstration and/or the anticipated cessation of the low RVP fuel program). With removal of the state 7.8 psi summertime RVP requirement, the federal 9.0 psi RVP limit remains as the applicable requirement.

To determine the emissions impact of removing the 7.8 psi RVP program requirements in the

Pittsburgh-Beaver Valley Area, PADEP considered first the pollutants that impact any NAAQS that are controlled through lowering of gasoline RVP: VOCs, NO_x, and direct PM_{2.5}. PADEP's analysis focuses on VOC and NO_x emissions because low RVP requirements were adopted by the Commonwealth to address the ozone NAAQS and because VOCs and NO_x emissions are the primary precursors for ground-level ozone formation. Also, NO_x, VOC, and direct PM_{2.5} emissions also contribute to formation of PM_{2.5}. PADEP limited its analysis to affected portions of the total emissions inventory for the Pittsburgh-Beaver Valley Area such as the highway vehicle emissions sector, nonroad vehicle emissions sector, and gasoline storage and distribution emissions sources within the stationary point source sector. EPA finds the Commonwealth's analysis of the affected universe of emissions sources reasonable, as the 7.8 psi RVP gasoline requirement impacts only emission sources that store, distribute, or combust gasoline. PADEP studied the impacts of low RVP program removal on the emissions inventory at several points in time representing a period just prior to removal of the low RVP program (i.e., 2014), the year of RVP program cessation (i.e., 2018), and a point five years after RVP program removal (i.e., 2023).

Table 1 summarizes PADEP's estimates of the expected change in highway vehicle emissions from replacement of the Commonwealth's 7.8 psi summertime low RVP program with the federal 9.0 psi RVP limit. To generate these estimates, PADEP used the latest version of EPA's Motor Vehicle Emissions Simulator (MOVES), version MOVES2014a, to characterize motor vehicle emissions. EPA notes that increasing gasoline RVP in and of itself no longer results in an increase in emissions of VOCs in the highway vehicle sector, as increases in VOCs from evaporative loss and permeation through porous materials are offset by improved exhaust

emissions reductions from improvements in new motor vehicles (e.g., improved engine control, air/fuel management, timing management, etc.). Thus, as newer vehicles replace older ones in the fleet, the VOC benefits from low RVP gasoline for the highway vehicle sector of the area's total emission inventory are reduced.

Table 1. Highway Emissions Comparison between PADEP's 7.8 psi Low-RVP Program and the Federal RVP Program for the Pittsburgh-Beaver Valley Area (in tons per day (tpd) and tons per year (tpy))

Scenario	2014					2018					2023				
	VOC		NO _x		PM _{2.5}	VOC		NO _x		PM _{2.5}	VOC		NO _x		PM _{2.5}
	tpd	tpy	tpd	tpy	tpy	tpd	tpy	tpd	tpy	tpy	tpd	Tpy	tpd	tpy	tpy
Pennsylvania 7.8 psi RVP Program	38.7	14,134	77.1	28,142	902	25.1	9,082	49.4	17,403	614	18.2	6,650	30.4	10,834	430
Federal 9.0 psi RVP Program						25.0	9,040	49.7	17,446	612	18.0	6,604	30.5	10,847	428
Reduction or Increase in Emissions (-) or (+)						-0.18	-41.4	+0.3	+43.5	-2.0	-0.24	-46.5	+0.09	13.1	-2.2

PADEP modelled nonroad emissions using the MOVES NONROAD model, version 2014a, coupled with the 2014 NEI version 1 emission inventory, to compile a base year scenario.

PADEP assumed this portion of the inventory would see an increase of three percent of total VOC emissions from removal of the Commonwealth's 7.8 psi RVP gasoline program. Table 2 summarizes the changes in nonroad vehicle and equipment emissions in the Pittsburgh-Beaver Valley area from repeal of the state low-RVP gasoline program.

Table 2. Nonroad Mobile Emissions Comparison Between PADEP's 7.8 psi Low-RVP Program versus the Federal RVP Program for the Pittsburgh-Beaver Valley Area (in tpy and tpd)

	2014	2018	2023
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	VOC	VOC		VOC	
	tpy	tpd	tpy	tpd	tpy
Pennsylvania 7.8 psi RVP Program	7,221	37.15	5,684	35.10	5,370
Federal 9.0 psi RVP Program		38.15	5,837	36.11	5,525
Reduction or Increase in Emissions (-) or (+)		1.00	153	1.01	155

Changes in gasoline RVP produce emissions from not only vehicles and equipment that store and combust the fuel, but also from evaporation and permeation from movement, storage, and transportation of the fuel as part of the gasoline distribution system. These sources include gasoline refineries and terminals, pipelines, gasoline tanker trucks, storage tanks, service station tanks, and portable gas cans. These are a combination of large, point sources of emissions and smaller area sources. PADEP estimates emissions from these sources by different means, ranging from use of emission factors (from EPA's AP-42 compendium of emission factors) coupled with activity information (or surrogates for activity like population) or gasoline sales numbers. Some larger sources (e.g., refineries and bulk gasoline terminals) are sufficiently large to be estimated or measured more directly as discrete sources in the Area's periodic point source emission inventory. Table 3 contains a summary of PADEP's estimated emissions from these point and area sources resulting from a change from the Pennsylvania low-RVP gasoline rule to the federal rule. PADEP assumed this portion of the inventory would see an increase of three percent of total VOC emissions from removal of the Commonwealth's 7.8 psi RVP gasoline program.

Table 3. Gasoline Distribution System Point and Area Sources Increase in VOC Emissions from Removal of Pennsylvania's 7.8 psi RVP Requirement in the Pittsburgh-Beaver Valley

Area (in tpy and tpd)

Point/Area Source Category	2014 NEI VOC (tpy)
Gasoline Terminals	131.3
Bulk Plants	74.9
Tank Truck Transit	10.4
Service Station Unloading	0.1
Total 2014 NEI Point Source RVP-Related Emissions	216.7
3% of 2014 Point Emissions, Attributable to 7.8 RVP repeal	7 tpy (0.02 tpd)

Table 4 summarizes combined highway mobile, nonroad, and point and area source emissions impacts from the removal of the Commonwealth's 7.8 psi low-RVP program for the 2018 and 2023 scenarios.

Table 4. Summary of Combined Emission Impacts from Removal of the 7.8 psi Program in the Pittsburgh-Beaver Valley Area in 2018 and 2023 (in tpy and tpd)

	VOC		NO_x		PM_{2.5}
	tpy	tpd	tpy	tpd	tpy
Highway	-41.4	-0.18	43.5	0.3	-2.0
Nonroad	153	1	0	0	0
Point/Area	7	-0.02	0	0	0
Total Change in 2018 Emissions	+119	+0.84	+43.5	+0.3	-2.0
Highway	-46.5	-0.24	13.1	0.09	-2.2
Nonroad	155	1.01	0	0	0
Point/Area	7	0.02	0	0	0

Total Change in 2023 Emissions	+116	+0.79	+13.1	+0.09	-2.2
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Based on our review of the information provided, EPA finds that PADEP used reasonable methods and the appropriate tools (e.g., emissions estimation models, emissions factors, and methodologies) in estimating the effect on emissions from removing the 7.8 psi RVP summertime gasoline program. PADEP determined that in 2018 the emissions increase resulting from removal of the 7.8 psi RVP requirement (and replacement with the federal 9.0 RVP gasoline program) would be 0.84 summertime tpd of VOC and 0.3 summertime tpd of NO_x in the Pittsburgh-Beaver Valley Area. PADEP's demonstration shows that direct emissions of PM_{2.5} decrease by 2.0 tpy from removal of the 7.8 psi RVP requirement (and replacement with the federal 9.0 RVP gasoline program). By 2023, the emissions impact of removal of the 7.8 psi RVP requirement would slightly decrease from 2018, to 0.79 tpd of VOCs and 0.09 tpd of NO_x, with direct PM_{2.5} emissions decreasing slightly more than 2018 estimates.

B. Pennsylvania's Substitution of Alternative Emissions Reduction Measures for the 7.8 psi Low-RVP Gasoline Program

PADEP has estimated lost and compensating emission reductions for the year of removal of the Commonwealth's low-RVP gasoline program (after considering the benefits from replacement with the federal 9.0 RVP gasoline program). PADEP has also estimated emissions impacts in the year 2023 to examine the future impacts of removal of the 7.8 psi state summertime RVP requirement. To compensate for the emissions impact of repeal of this requirement in the Pittsburgh-Beaver Valley Area, PADEP has analyzed the emission benefits associated with two substitute measures previously implemented but not "claimed" in any prior SIP attainment plan

(under CAA section 172) for the Commonwealth. These measures are: 1) Overcontrol of VOC emissions from Pennsylvania's adhesives rule (25 Pa. Code § 129.77) and 2) unclaimed creditable emissions reductions associated with the permanent closure in 2015 of a glass manufacturing facility in Allegheny County, Guardian Industries Jefferson Hills facility.

1. Pennsylvania's Adhesives, Sealants, Primers, and Solvents Rule

Pennsylvania adopted emissions limits for adhesives and sealants consistent with the Ozone Transport Commission (OTC) model rule covering 37 categories of products, on December 24, 2010 (40 Pa. B. 7340). On June 25, 2015 (80 FR 36482), EPA approved the adhesives rule (25 Pa. Code Section 129.77) into the Pennsylvania SIP. Although this measure was implemented prior to the Commonwealth's repeal of the 7.8 psi low-RVP gasoline program, the emissions reductions from the adhesives rule have not previously been "credited" in any attainment, reasonable further progress, redesignation, or maintenance plan SIP for any NAAQS. PADEP has quantified the reductions from the OTC adhesives model rule using studies performed by the California Air Resources Board (CARB), upon which the OTC model rule was derived. As an area source measure, PADEP relied upon population based, per capita emission reduction estimates for the 7-county Pittsburgh-Beaver Valley Area. PADEP extrapolated its per capita emission factor estimate prepared when it adopted the adhesives rule (based on 2009 area population) by population data for 2014, 2018, and 2023. For purposes of comparison to the low-RVP rule, PADEP seasonally adjusted its original estimate for the adhesives rule (based on a 3-month June-August summer season) to reflect the longer low-RVP gasoline summertime season (i.e., 5-month May-September control season). Table 5 summarizes the daily and annual VOC emissions benefit provided by the adhesives rule.

Table 5. Summary of Pennsylvania’s Adhesives Rule VOC Emission Reduction Estimates for 2014, 2018, and 2023

	2014	2018	2023
Projected Pittsburgh-Beaver Valley Area Population (persons)	2, 358,096	2,346,571	2,338,002
PADEP Adhesives Rule VOC Annual Reduction Emission Factor (tons per person per year)	4.96×10^{-4}	4.96×10^{-4}	4.96×10^{-4}
PADEP Adhesives Rule VOC Daily Reduction Emission Factor (tons per person per day)	1.36×10^{-6}	1.36×10^{-6}	1.36×10^{-6}
VOC Reduction from PADEP Adhesives Rule (in tpy)	1,169	1,163	1,159
VOC Reduction from PADEP Adhesives Rule (in tpd)	3.21	3.20	3.19

2. Shutdown of Guardian Industries Jefferson Hills Facility

To further aid in offsetting emission reductions lost from the removal of the summertime 7.8 psi low-RVP gasoline requirement (after replacement with the federal 9.0 RVP gasoline program), PADEP is relying upon emission reductions from the permanent closure of a Guardian Industries Corporation glass manufacturing facility located in Jefferson Hills, Allegheny County (Facility ID 4200300342). This facility ceased operations in August 2015, and Guardian Industries did not request that potentially creditable emission reductions be preserved in the inventory within the one year deadline for doing so under 25 Pa. Code Chapter 127, Subchapter E (relating to emission reduction credit generation under Pennsylvania’s new source review (NSR) program). Having missed the legal deadline for doing so, the associated emission reductions from the facility shutdown can no longer be used by any facility for complying with the NSR program.

Pennsylvania asserts the reductions have not been used and cannot be used in the future by Pennsylvania to meet any other obligation, including attainment demonstration, facility emission limitation, reasonable further progress, or maintenance plan requirements for the area. The facility has been permanently closed and the emission source removed. The plan approvals and operating permits for the facility are no longer valid. Any new source at this facility would be subject to NSR permitting provisions (including securing emission offsets as required by CAA and Pennsylvania SIP) and would not be able to use any emission reductions from this closure for permitting purposes.

To quantify emission reductions from the Guardian Industries Jefferson Hills facility shutdown, PADEP applied requirements from Pennsylvania's creditable emissions decrease provisions for applicability determination under the NSR program (25 Pa. Code Section 127.203a), used for calculation of lookback periods and baseline credit determinations for emission reduction credit generation. Table 6 summarizes PADEP's estimate of creditable emission reductions from the Guardian Industry Jefferson Hills facility for use in partially offsetting the removal of the 7.8 psi RVP gasoline program.

Table 6. Summary of Emission Reductions from the Permanent Shutdown of Guardian Industries Jefferson Hills Facility

Permanent Emission Offsets for 24-month Annual Average (August 2013 – July 2015)		
Pollutant	Offsets (in tpy)	Offsets (in tpd)
NO _x	625	1.8
VOC	13.8	0.04

PM _{2.5}	26.5	N/A
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C. Comparison of Emissions Impacts from Removal of the Commonwealth’s 7.8 psi RVP Gasoline Program and the Uncredited Emission Reductions from Substitute Measures

Pennsylvania is relying upon NO_x, VOC, and PM_{2.5} emission reductions from its adoption of the OTC model adhesives rule and from the shutdown of Guardian Industries Jefferson Hills glass manufacturing facility in Allegheny County to offset the emissions impact of removing the Commonwealth’s summertime gasoline volatility control rule and to support that its argument that removal of 7.8 psi RVP requirement from the SIP will not interfere with attainment of any NAAQS. Pennsylvania has elected to adjust upward by 25 percent its estimates for the emission impact of the removal of the 7.8 psi RVP gasoline program (as shown in Table 4), to account for uncertainty in its calculation of the estimates for the emissions benefits from that program. Table 7 summarizes the Pittsburgh-Beaver Valley Area emissions increases from repeal of the low-RVP gasoline program compared to the emissions benefits resulting from the alternative emission reduction measures.

Table 7. Summary of Pittsburgh-Beaver Valley Impacts from Removal of the 7.8 psi Gasoline Volatility Program Compared to Emissions Benefits from Alternative Measures (in 2018 and 2023)

2018	VOC		NO _x		PM _{2.5}
	tpy	tpd	tpy	tpd	tpy

Change in Emissions from RVP Rule Repeal ⁶	119	0.84	43.5	0.3	-2.0
Emission Adjustment to RVP Change Estimate (25% increase)	30	0.21	11	0.08	-2.0
Total Emissions Requiring Offset	149	1.05	54.5	0.38	--
Adhesives Rule Reductions for Offset	1,163	3.2	0	0	0
Facility Shutdown Reductions for Offset	13.8	0.04	625	1.8	26.5
Total Available Offset Emissions	1,177	3.24	625	1.8	28.5
Surplus Reductions After Offset (Total Emissions Requiring Offset – Total Available Offsets)	1,029	2.19	570.5	1.0	28.5
2023	VOC		NOx		PM_{2.5}
	tpy	tpd	tpy	tpy	tpy
Change in Emissions from RVP Rule Repeal ⁷	116	0.79	13.1	0.09	-2.0
Emission Adjustment to RVP Change Estimate (25% increase)	29	0.20	3.3	0.02	--
Total Emissions Requiring Offset	144	0.99	16.4	0.11	-2.0
Adhesives Rule Reductions for Offset	1,159	3.19	0	0	0
Facility Shutdown Reductions for Offset	13.8	0.04	625	1.8	26.5

⁶ This increase (or decrease) in emissions is the net emission change when comparing the Commonwealth's 7.8 psi requirement for the Pittsburgh-Beaver Valley Area to the federal 9.0 psi RVP program requirement that will remain upon removal of the Commonwealth's program.

⁷ This increase (or decrease) in emissions is the net emission change when comparing the Commonwealth's 7.8 psi requirement for the Pittsburgh-Beaver Valley Area to the federal 9.0 psi RVP program requirement that will remain upon removal of the Commonwealth's program.

Total Available Offset Emissions	1,173	3.23	625	1.8	28.5
Surplus Reductions After Offset (Total Emissions Requiring Offset – Total Available Offsets)	1,029	2.24	608.6	1.69	28.5

As indicated in Table 7, Pennsylvania has a surplus of VOC, NO_x, and PM_{2.5} emission reductions from the alternative emission reduction measures after offsetting the emissions reductions lost from repeal of the Commonwealth's low-RVP gasoline program, in both 2018 (the year of repeal of the low-RVP gasoline program) and in the 2023 future case. Although not needed to offset the low-RVP gasoline rule, PADEP is electing to retire all emissions reductions from the facility shutdown and will not use them for any future NSR program purposes. These surplus emission reductions, not previously claimed for any SIP-approved plan, will help to ensure that removal of the low-RVP gasoline program will not interfere with any NAAQS for the Pittsburgh-Beaver Valley Area.

EPA believes that the removal of the 7.8 psi low RVP fuel program requirements in the Pittsburgh-Beaver Valley Area does not interfere with Pennsylvania's ability to demonstrate compliance with any of the ozone or PM_{2.5} NAAQS, which could potentially have been impacted by the NAAQS pollutant precursors that are the subject of the SIP revision. EPA's analyses of the Commonwealth's SIP revision for CAA 110(l) impact is supported by its use of alternate emission reduction measures that ensure permanent, enforceable, contemporaneous, surplus emissions reductions are achieved within the Pittsburgh-Beaver Valley Area which far exceed the slight increase in NO_x and VOC pollutants from the removal of low RVP fuel especially as

Pennsylvania is still subject to the federal RVP fuel requirement of 9.0 psi. Based on Pennsylvania's CAA 110(l) analysis showing surplus emission reductions (see Table 7), EPA has no reason to believe that the removal of the low RVP fuel requirements in the Pittsburgh-Beaver Valley area will negatively impact the area's ability to attain or maintain any NAAQS including specifically ozone and PM_{2.5} or interfere with reasonable further progress. In addition, EPA believes that removing the 7.8 psi low RVP program requirements in the Pittsburgh-Beaver Valley Area will not interfere with any other CAA requirement as the Area will remain subject to the federal low RVP fuel requirements.

V. Impacts on the Boutique Fuels List.

Section 1541(b) of the Energy Policy Act of 2005 required EPA, in consultation with the U.S. Department of Energy, to determine the number of fuels programs approved into all SIPs as of September 1, 2004 and to publish a list of such fuels. On December 28, 2008 (71 FR 78192), EPA published the list of boutique fuels. EPA maintains the current list of boutique fuels on its web site at: <https://www.epa.gov/gasoline-standards/state-fuels>. The final list of boutique fuels was based on a fuel type approach. CAA section 211(c)(4)(C)(v)(III) requires that EPA remove a fuel from the published list if it is either identical to a federal fuel or is removed from the SIP in which it is approved. Under the adopted fuel type approach, EPA interpreted this requirement to mean that a fuel would have to be removed from all SIPs in which it was approved in order for it to be removed from the list. (71 FR 78195).

The 7.8 psi RVP fuel program (as required by Pa. Code Chapter 126, Subchapter C), as approved into Pennsylvania's SIP, is a fuel type that is included in EPA's boutique fuel list (71 FR 78198-99; <https://www.epa.gov/gasoline-standards/state-fuels>). The specific counties in the Pittsburgh-

Beaver Valley Area where summer low RVP gasoline is required are identified on EPA's Gasoline Reid Vapor Pressure web page (<https://www.epa.gov/gasoline-standards/gasoline-reid-vapor-pressure>). Subsequent to the final effective date of EPA's approval of Pennsylvania's May 2, 2018 SIP revision to remove Pennsylvania's Chapter 126, Subchapter C RVP requirement from the SIP, EPA will update the State Fuels and Gasoline Reid Vapor Pressure web pages with the effective date of the SIP removal. However, the entry for Pennsylvania will be not be completely deleted from the list of boutique fuels, as Allegheny County remains subject to a separate, SIP-approved 7.8 psi RVP gasoline requirement of ACHD's Rules and Regulations, Article XXI, pending future action by ACHD to repeal that rule and submit a formal SIP revision requesting its repeal from the Pennsylvania SIP. This deletion of Armstrong, Beaver, Butler, Fayette, Washington, and Westmoreland Counties from the list will not result in an opening on the boutique fuels list because the 7.8 psi RVP fuel type remains for one Pennsylvania County, and in other state SIPs.

VI. What Action is EPA Taking?

EPA is approving Pennsylvania's May 2, 2018 SIP revision to remove the low RVP fuel requirements at 25 Pa. Code Chapter 126, Subchapter C from the Pennsylvania SIP. With this action, EPA is also approving the Commonwealth's supporting CAA 110(l) demonstration in its May 2, 2018 submission that removal of the low RVP gasoline program does not interfere with the Commonwealth's ability to attain or maintain any NAAQS in the Pittsburgh-Beaver Valley Area. Our approval of the May 2, 2018 SIP submittal is in accordance with CAA requirements in section 110, including section 110(l) specifically.

EPA's approval of the May 2, 2018 Pennsylvania SIP revision does not remove the separate SIP requirement applicable requiring use of 7.8 psi RVP gasoline during summertime months in Allegheny County, under requirements set forth in Article XXI, Rules and Regulations of the ACHD, which were approved by EPA as part of the Commonwealth's SIP on April 17, 2001 (66 FR 19724). PADEP will submit a SIP revision, at a later date, on behalf of ACHD to remove or otherwise amend the separate Allegheny County low RVP gasoline program rule. Neither ACHD's rule nor the related approved Pennsylvania SIP for Article XXI are the subject of this action or the Pennsylvania May 2, 2018 low RVP gasoline SIP revision.

EPA is publishing this rule without prior proposal because EPA views this as a noncontroversial amendment and anticipates no adverse comment. However, in the "Proposed Rules" section of today's **Federal Register**, EPA is publishing a separate document that will serve as the proposal to approve the SIP revision if adverse comments are filed. This rule will be effective on **[insert date 60 days after date of publication in the Federal Register]** without further notice unless EPA receives adverse comment by **[insert date 30 days after date of publication in the Federal Register]**. If EPA receives adverse comment, EPA will publish a timely withdrawal in the **Federal Register** informing the public that the rule will not take effect. EPA will address all public comments in a subsequent final rule based on the proposed rule. EPA will not institute a second comment period on this action. Any parties interested in commenting must do so at this time.

VII. Statutory and Executive Order Reviews

A. General Requirements

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the CAA and applicable federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- is not a “significant regulatory action” subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- is not an Executive Order 13771 (82 FR 9339, February 2, 2017) regulatory action because SIP approvals are exempted under Executive Order 12866.
- does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.);
- is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.);
- does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- does not have federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);

- is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the state, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law.

B. Submission to Congress and the Comptroller General

The Congressional Review Act, 5 U.S.C. 801 et seq., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a “major rule” as defined by 5 U.S.C.

804(2).

C. Petitions for Judicial Review

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by **[Insert date 60 days after date of publication in the Federal Register]**. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. Parties with objections to this direct final rule are encouraged to file a comment in response to the parallel notice of proposed rulemaking for this action published in the proposed rules section of today's **Federal Register**, rather than file an immediate petition for judicial review of this direct final rule, so that EPA can withdraw this direct final rule and address the comment in the proposed rulemaking action. This action to remove from the Pennsylvania SIP requirements for low RVP fuel for the Pittsburgh Area may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Carbon monoxide, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Volatile organic compounds.

Dated: June 6, 2018.

Cecil Rodrigues,

Acting Regional Administrator,
Region III.

40 CFR part 52 is amended as follows:

PART 52 – APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 et seq.

Subpart NN--Pennsylvania

2. In § 52.2020, the table in paragraph (c)(1) is amended by removing the title and entries for “Subchapter C – Gasoline Volatility Requirements” under Title 25, Chapter 126 Standard for Motor Fuels.

[FR Doc. 2018-12703 Filed: 6/14/2018 8:45 am; Publication Date: 6/15/2018]